

## APPENDIX D

### GESC DRAWING AND NARRATIVE CHECKLIST

A copy of this GESC Drawing and Narrative Checklist must be completely filled out, signed by the designer, and submitted with the GESC Plan.

PROJECT NAME: \_\_\_\_\_

#### **A. Narrative Requirements:**

The narrative report must include the following information at a minimum.

1. Applicant Information.
  - a. the names, mailing addresses, telephone numbers, and E-mail addresses of :
    - i. The Applicant.
    - ii. Professional Design Engineer preparing (or supervising the preparation of) the GESC Plan.
    - iii. If different from the Applicants, shall include the Owner and/or Developer of the project.
2. Signature Page.
  - a. Permittees acknowledgment of the review and acceptance of responsibility, with signatures and dates.
  - b. A statement by the Professional Engineer acknowledging responsibility for the preparation of the GESC Plan.
  - c. The following note shall be included on the signature page along with the Professional Engineer's stamp.
    - i. *"This Grading, Erosion and Sediment Control Plan has been placed in the City of Cañon City file for this project and appears to fulfill the applicable Grading, Erosion and Sediment Control Criteria. I understand that additional grading, erosion and sediment control measures may be required of the Permittees, due to unforeseen erosion problems or if the submitted plan does not function as intended. The requirements of this plan shall run with the land and be the obligation of the Permittees until such time as the plan is properly completed, modified or voided."*
3. Project Description.
  - a. Project location including township, range, section and quarter section, or the latitude and longitude, of the approximate center of the project.
  - b. A brief description of the nature and purpose of the land-disturbing activity and ultimate disposition of the property.
  - c. Areas and volumes:
    - i. Total area of the site (acres).
    - ii. Total area of disturbance (acres).
    - iii. Estimate of the quantity (in cubic yards) of excavation and fill involved, import/export estimates if site not balanced.
  - d. An estimate of the runoff coefficient of the site before and after construction activities are completed.
  - e. Name and location of/distance from immediate and ultimate receiving waters of discharge points or, if the discharge is to a municipal separate storm sewer, the name and location of the system, the location of the storm sewer discharge, and the ultimate receiving water(s).

4. Existing Site Conditions.
  - a. Brief description historic use of the site.
  - b. Description of the existing topography. Identify any previously constructed features, wetlands, and other physical features of the site.
  - c. A brief description of the soils on the site including information on soil type and names, mapping unit, erodability, permeability, hydrologic soil group, depth, texture, and soil structure (This information may be obtained from the soil report for the site, from adjacent sites if acceptable to the County, or the applicable Soil Survey prepared by the Natural Resources Conservation Service (NRCS)).
  - d. Description of the existing vegetation at the site, including percent coverage.
  - e. Description of any wetlands on the site.
  - f. Description of neighboring areas such as streams, lakes, residential areas, roads, etc., which might be affected by the land disturbance.
  - g. Location and description of any anticipated non-stormwater components of the discharge, such as springs and landscape irrigation return flow.
5. Timing/Phasing Schedule.
  - a. A schedule indicating the anticipated starting and completion time periods of the site grading and/or construction sequence, including the installation and removal of erosion and sediment control measure and anticipated final stabilization.
  - b. Indicate the anticipated starting and completion time periods of individual project phases.
6. Pollution Control Measures.
  - a. Explanation of how stormwater runoff from, run on to, and site stormwater will be handled during construction,
  - b. Description of all structural and non-structural control measures that will be installed/implemented to prevent or reduce all potential pollutants from leaving the site.
  - c. Installation and/or construction details for implemented BMP's. If these details are to be included as detail sheets of the GESC drawing, indicate the location in the drawing set where details can be found.
  - d. Identify staging areas, materials handling and material storage, and spill prevention (*and response*) measures appropriate to the site.
7. Maintenance and Inspection Procedures:
  - a. Maintenance and inspection procedures and schedules to ensure BMP's are adequately placed and in effective operating condition.
  - b. Inspection report and procedure to be used by project GESC manager.
  - c. Post-construction maintenance and inspection schedules for permanent BMP's.
8. Permanent Stabilization.
  - a. Brief description, including applicable specifications, of how the site will be stabilized after construction is completed. Should include:
    - i. Identification of types of permanent stabilization including percentages of site disturbance affected.
    - ii. Timeline and special provisions for achieving final stabilization (i.e. irrigation, dry land, native, etc.).

## **B. GESC DRAWING- COVER SHEET:**

1. General Information.
  - a. Project name.
  - b. Project location/address.
  - c. Owner's name, address, phone number.
  - d. Design firm's name, address, and phone number.
2. Plan Sheet Index.
  - a. For projects that require multiple plan-view sheets to adequately show the project area (based on the specified scale ranges) a single plan-view sheet shall be provided at a scale appropriate to show the entire site on one sheet. Areas of coverage of the multiple blow-up sheets are to be indicated as rectangles on the index sheet.
3. General Location Map.
  - a. Scale of 1-inch to 1000- feet to 8000-feet indicating:
    - i. General vicinity of the site location.
    - ii. Major roadway names.
    - iii. North arrow and scale.
4. GESC Plan Designer's Signature Block.
  - a. Name, date, and Engineer's stamp.
  - b. Signature block shall include the following notes
    - i. "**THE GRADING, EROSION AND SEDIMENT CONTROL PLAN INCLUDED HEREIN HAS BEEN PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE REQUIREMENTS OF THE GRADING, EROSION, AND SEDIMENT CONTROL (GESC) CRITERIA MANUAL OF THE CITY OF CAÑON CITY.**"
    - ii. "**THE GRADING, EROSION AND SEDIMENT CONTROL PLAN INCLUDED HEREIN HAS BEEN PLACED IN THE CITY OF CAÑON CITY FILE FOR THIS PROJECT AND APPEARS TO FULFILL APPLICABLE CITY GRADING, EROSION AND SEDIMENT CONTROL CRITERIA, AS AMENDED. ADDITIONAL GRADING, EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE PERMITTEE(S) DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED GESC PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS GESC PLAN SHALL BE THE OBLIGATION OF THE PERMITTEE(S) UNTIL SUCH TIME AS THE GESC PLAN IS PROPERLY COMPLETED, MODIFIED OR VOIDED**"
5. City Acceptance Block.

**C. GESC DRAWING- INITIAL GESC PLAN:** This plan sheet shall provide grading, erosion and sediment controls for the initial clearing, grubbing and grading of a project. At a minimum, it shall contain:

1. Property Lines.
2. Existing and proposed easements.
3. Existing topography at one- or two-foot contour intervals, extending a minimum of 100 feet beyond the property line.
4. Location of any existing structures or hydrologic features within the mapping limits
5. USGS Benchmark used for project.
6. Limits of construction encompassing all areas of work, access points, storage and staging areas, borrow areas, stockpiles, and utility tie-in locations in on-site and off-site locations. Stream corridors and other resource areas to be preserved and all other areas outside the limits of construction shall be lightly shaded to clearly show area not to be disturbed.
7. Flow arrows that depict stormwater flow directions on-site and runoff direction
8. Location of stockpiles, including topsoil, imported aggregates, and excess material
9. Location of storage and staging areas for equipment, fuel, lubricant, chemical (and other materials) and waste storage.
10. Location of borrow or disposal areas.
11. Location of temporary roads.
12. Location, map symbol, and letter callouts of all initial erosion and sediment control measures.
13. Installation and implementation specifications of all structural control measures or a reference to the document which contains the installation and implementation specifications.
14. City Acceptance Block.
15. Other information as may be reasonably required by the City of Cañon City.

**D. GESC DRAWING- INTERIM GESC PLAN:** This plan sheet shows control measures used to control grading, erosion and sediment during the initial overlot grading, site construction and site revegetation process. At a minimum, it shall contain the following information: The Interim GESC Plan shall show all the information included on the Initial GESC Plan, as noted below:

1. Initial Erosion Control Plan BMPs to be screened/faded and dimensions removed.
2. Property lines (bold and clearly identifiable).
3. Existing & proposed ROW and easements.
4. Existing topography (faded).
5. Proposed topography (2-foot contour intervals – heavy solid lines).
6. Structures and natural features, including locations of springs, streams, wetlands and other surface waters.
7. Limits of construction, including:
  - a. All areas of work.
  - b. Access points.
  - c. Storage and staging areas.
  - d. Borrow and stockpile areas (on and offsite).
  - e. Areas of cut and fill.
  - f. Utility tie-in locations on- and off-site.
  - g. Stream corridors and other resource areas to be preserved and all areas outside the limits of construction shall be lightly shaded to show they are not to be disturbed.
8. Locations of stockpiles: Topsoil; imported aggregates; excess material
9. Locations of storage and staging areas for:
  - a. Equipment, fuel, lubricant, chemicals and supplies.
  - b. Waste storage: including, but not limited to areas for liquid, concrete, masonry, and asphalt.
10. Locations of temporary/haul roads.
11. Locations, map symbols, and letter callouts of all Interim BMPs.
12. Sizes, dimensions and types of all Interim BMPs.
13. Location of proposed structures.
14. Flow directional arrows.
15. Streets and street names labeled.
16. Locations of all drainage and water quality features and facilities, paved areas, retaining walls, cribbing and other permanent features.
17. Standard notes:
  - a. SHADED CONTROL MEASURES WERE INSTALLED IN INITIAL STAGE AND SHALL BE LEFT IN PLACE IN INTERIM STAGE.
  - b. ALL INTERIM CONTROL MEASURES, INCLUDING SEEDING AND MULCHING OF DISTURBED AREAS, MUST BE COMPLETED PRIOR TO ISSUANCE OF ANY CURB AND GUTTER PERMITS.
  - c. SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, CULVERTS, STORM DRAINS, AND INLET AND OUTLET PROTECTION.
18. Location of permanent BMP's.
19. City acceptance block.
20. Other information as required by the City.

**E. GESC DRAWINGS- Final GESC Plan.** This plan sheet shows controls for final completion of the site. At a minimum, this plan sheet shall contain the indicated information. The Final GESC Plan shall include all information shown on the Initial and Interim Plans, as noted below:

1. Initial and Interim BMPs to be screened/faded and dimensions removed.
2. Label any Initial and Interim BMPs to be removed and areas stabilized.
3. Property lines (bold and clearly identifiable).
4. Existing & proposed ROW and easements.
5. Proposed topography (2-foot contour intervals – heavy solid lines).
6. Structures and natural features.
7. Limits of construction to be stabilized, including:
  - a. All areas of work.
  - b. Access points, temporary/haul roads.
  - c. Storage and staging areas.
  - d. Borrow and stockpile areas (on and offsite).
  - e. Utility tie-in locations on- and off-site.
  - f. Stream corridors and other resource areas to be preserved.
8. Locations, map symbols, and letter callouts of all Final BMPs, including landscaping and other measures.
9. Sizes, dimensions and types of all Final and Permanent BMPs.
10. Location of proposed structures.
11. Locations of all drainage and water quality features and facilities, paved areas, retaining walls, cribbing, planting and other permanent features. Must include site drainage patterns depicting movement of stormwater.
12. Show landscaping or reference landscaping plan (assure there are not conflicts between the landscape plan and GESC plan).
13. Standard notes:
  - a. SHADED CONTROL MEASURES WERE INSTALLED IN INITIAL OR INTERIM GESC PLAN AND, UNLESS OTHERWISE INDICATED, SHALL BE LEFT IN PLACE UNTIL REVEGETATION ESTABLISHMENT.
  - b. SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, CULVERTS, STORM DRAINS, AND INLET AND OUTLET PROTECTION.
14. City acceptance block.
15. Other information as may be reasonably required by the City.

Prepared By: (printed name and signature)	
Company Name:	
Date:	

<i>City Reviewer</i>	
<i>City Review Date</i>	
<i>Review Status</i>	